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PEREZ, JULIO R				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/806,502

Applicant(s)

RUDOLF ET AL.

Examiner

JULIO PEREZ

Art Unit

2617

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/22)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 12/10/09

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 09/28/09 have been fully considered but they are not persuasive.

With respect to independent claims 19, 22, 35 and 38, the applicant argues that the prior art of record, Hwang (7,317,700) and Kwak et al (2004/0001472) do not teach or suggest a control signal that indicates an HSDPA transmit power level of each allocate timeslot *indicated by the control signal* that is not allowed to exceed a maximum allowed HSDPA transmit power level as indicated by the control signal or power level of individual timeslots, on pages 11-12.

In response, the examiner respectfully disagree, Hwang teaches a controller providing "signal information for power utilization" with "at least" providing data of allowable power to transmit by the node B to users, which giving its broadest and reasonable interpretation, Hwang teaches transmit power level of each allocated timeslot as indicated by the control signal, thus, "at least" providing a signal information of power to be utilized, which reads on "receiving at least one control signal indicating at least allowed HSDPA transmit power level **OR** a plurality of timeslots allocated for usage of HSDPA channels" (col. 3, lines 36-48; col. 4, lines 59-67-col. 5, lines 1-3). Furthermore, it should be noted that Hwang has not been applied alone to meet the argued limitation. It is the combination of Hwang and Kwak what meets the argued limitation.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 19, 22, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang (US007317700B2) in view of Kwak et al. (US 20040001472A1).

Regarding claims 19, 22, 35, Hwang discloses providing high speed downlink packet access (HSDPA) services (Figure 6, # 61) comprising: receiving at least one control signal indicating at least one maximum allowed HSDPA transmit power level and a plurality of timeslots allocated for usage of HSDPA channels (col. 3, lines 27-56; col. 4, lines 59-67-col. 5, lines 16, teach a controller providing signal information for power utilization with, "**at least**", providing information of allowable power to transmit by the node B to users, which reads on "**receiving at least one control signal indicating at least allowed HSDPA transmit power level** and a plurality of timeslots allocated for usage of HSDPA channels" (col. 3, lines 36-43; col. 4, lines 59- 67- col. 5, lines 1-3); transmitting at least one feedback signal indicating the results of measurements of the power of at least one of the allocated timeslots during a predetermined time period (col. 5, lines 7-16, describe the node B transmitting back a signal to acknowledge its reserve of

resources, i.e., power); thus, it reads on "transmitting at least one feedback signal indicating results of power".

What Hwang does not explicitly disclose is at least one maximum transmitting power level for a particular timeslot allocated for usage of a HSDPA channel.

Kwak describes transmitting radio link with power offset information from the SNRC to the UE for managing power allocation (pars. 31-32; 30, 33; 50, 56).

It would have obvious to one of skilled in the art at the time of the invention to modify Hwang, such that at least one maximum transmit power level for a particular timeslot allocated for usage of a HSDPA channel, in order to manage resources information for connection between the UEs and the radio stations.

4. Claims 25, 30, 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang (US007317700B2) in view of Kwak et al. (US 20040001472A1).

Regarding claims 25, 30, 41, Hwang discloses providing high speed downlink packet access (HSDPA) services (Figure 6, # 61), the method comprising:

receiving at least one control signal indicating at least one maximum allowed HSDPA transmit power level and a plurality of timeslots allocated for usage of HSDPA channels (col. 3, lines 27-56; col. 4, lines 59-67-col. 5, lines 16, teach, **"at least"**, controller providing information of allowable power to transmit by the node B to users, which reads on **"receiving at least one control signal indicating at least one maximum allowed HSDPA transmit power level and a plurality of transmission timing intervals for usage of HSDPA channels"**, wherein the HSDPA transmit power level of each allocated timeslots is not allowed to exceed a maximum allowed HSDPA

transmit power level indicated for the allocated timeslots (col. 3, lines 36-43; col. 4, lines 59- 67-col. 5, lines 1-3, describe the maximum allowable power allowed for each cell for channels to transmit); transmitting at least one feedback signal indicating the results of measurements of the power of at least one of the allocated timeslots during a predetermined time period (col. 5, lines 7-16, describe the node B transmitting back a signal to acknowledge its reserve of resources, i.e., power); thus, it reads on "transmitting at least one feedback signal indicating results of power".

What Hwang does not explicitly disclose is at least one maximum transmitting power level for a particular timeslot allocated for usage of a HSDPA channel.

Kwak describes transmitting radio link with power offset information from the SNRC to the UE for managing power allocation (pars. 31-32; 30, 33; 50, 56).

It would have obvious to one of skilled in the art at the time of the invention to modify Hwang, such that at least one maximum transmit power level for a particular timeslot allocated for usage of a HSDPA channel, in order to manage resources information for connection between the UEs and the radio stations.

5. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang (US007317700B2) in view of Kwak et al. (US 20040001472A1.

Regarding claim 38, Hwang discloses an RNC for providing high speed downlink packet access (HSDPA) services (Figure 6, # 61; col. 3, lines 27-48), the method comprising: transmitting at least one control signal indicating at least one maximum allowed HSDPA transmit power level and a plurality of timeslots allocated for usage of HSDPA channels (col. 3, lines 27-56; col. 4, lines 59-67-col. 5, lines 16, teach,

transmitting **"at least"**, providing information of allowable power to transmit by the node B to users, which reads on **"receiving at least one control signal indicating at least maximum allowed HSDPA transmit power level and a plurality of timeslots allocated for usage of HSDPA channels"**, wherein the HSDPA transmit power level of each allocated timeslots is not allowed to exceed a maximum allowed HSDPA transmit power level indicated for the allocated timeslots (col. 3, lines 36-43; col. 4, lines 59- 67- col. 5, lines 1-3, describe the maximum allowable power allowed for each cell for each channel to transmit); transmitting at least one feedback signal indicating the results of measurements of the power of at least one of the allocated timeslots during a predetermined time period (col. 5, lines 7-16, describe the node B transmitting back a signal to acknowledge its reserve of resources, i.e., power); thus, it reads on "transmitting at least one feedback signal indicating results of power".

What Hwang does not explicitly disclose is at least one maximum transmitting power level for a particular timeslot allocated for usage of a HSDPA channel.

Kwak describes transmitting radio link with power offset information from the SNRC to the UE for managing power allocation (pars. 31-32; 30, 33; 50, 56).

It would have obvious to one of skilled in the art at the time of the invention to modify Hwang, such that at least one maximum transmit power level for a particular timeslot allocated for usage of a HSDPA channel, in order to manage resources information for connection between the UEs and the radio stations.

6. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang (US007317700B2) in view of Kwak et al. (US 20040001472A1).

Regarding claim 46, Hwang discloses an RNC for providing high speed downlink packet access (HSDPA) services (Figure 6, # 61; col. 3, lines 27-48), the method comprising: transmitting at least one control signal indicating at least one maximum allowed HSDPA transmit power level and a plurality of timeslots allocated for usage of HSDPA channels (col. 3, lines 27-56; col. 4, lines 59-67-col. 5, lines 16, teach, transmitting **"at least"**, providing information of allowable power to transmit by the node B to users, which reads on **"receiving at least one control signal indicating at least maximum allowed HSDPA transmit power levels and a plurality of transmission timing intervals for usage of HSDPA channels"**, wherein the HSDPA transmit power level of allocated timeslots is not allowed to exceed a maximum allowed HSDPA transmit power level indicated for the allocated timeslots (col. 3, lines 36-43; col. 4, lines 59- 67-col. 5, lines 1-3, describe the maximum allowable power allowed for each cell for each channel to transmit); transmitting at least one feedback signal indicating the results of measurements of the power of at least one of the allocated timeslots during a predetermined time period (col. 5, lines 7-16, describe the node B transmitting back a signal to acknowledge its reserve of resources, i.e., power); thus, it reads on "transmitting at least one feedback signal indicating results of power".

What Hwang does not explicitly disclose is at least one maximum transmitting power level for a particular timeslot allocated for usage of a HSDPA channel.

Kwak describes transmitting radio link with power offset information from the SNRC to the UE for managing power allocation (pars. 31-32; 30, 33; 50, 56).

It would have obvious to one of skilled in the art at the time of the invention to modify Hwang, such that at least one maximum transmit power level for a particular timeslot allocated for usage of a HSDPA channel, in order to manage resources information for connection between the UEs and the radio stations.

7. Claims 21, 24, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Kwak (US 20040001472A1) as applied to claims above, and further in view of Cha et al. (US 20040090934A1).

Regarding claims 21, 24, 37, the combination discloses claim 19, but the control signal limits the allowed HSDPA transmit power level to ensure that there is sufficient power reserved for non-HSDPA services.

Cha discloses allocating percentage of the allocated transmitting power for non services related to HSD packet access (pars. 18, 27, describe the allowance of services for non high speed data services with sufficient power on transmission).

It would have obvious to one of skilled in the art at the time of the invention to modify the teachings of Hwang in view of Kwak, such that the control signal limits the allowed HSDPA transmit power level to ensure that there is sufficient power reserved for non-HSDPA services, in order to share the transmission power between differing services to render the system more efficiently.

8. Claims 20, 23, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Kwak (US 20040001472A1) as applied to claims above, and further in view of Wang et al. (US 20050117553A1).

Regarding claims 20, 23, 36, the combination teaches claim 19, but it is silent on wherein the predetermined time period is at least 100 ms.

Wang teaches "TDMA frame having a duration of 10 ms per timeslot and, which subdivided into fifteen time slots", that includes at least 10 slots (i.e., 10x10 ms), (par. 42, lines 17-20, slots are subdivided in times of 10 by 10, i.e., which reads on a predetermined time period of at least 100 ms).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Hwang in view of Kwak, to include Wang, as it is known to implement wireless communication systems with time periods during provision of timeslots for data transportation.

9. Claims 26, 31, 42, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Kwak (US 20040001472A1) as applied to claims above, and further in view of Wang et al. (US 20050117553A1).

Regarding claims 26, 31, Hwang discloses claims 25, 30, 41, but it is silent on wherein the predetermined time period is at least 100 ms.

Wang teaches "TDMA frame having a duration of 10 ms per timeslot and, which subdivided into fifteen time slots", that includes at least 10 slots (i.e., 10x10 ms), (par. 42, lines 17-20, including 10 slots of 10x10 milliseconds, which reads on a predetermined time period of at least 100 ms).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Hwang in view of Kwak to include Wang, as it is

known to implement wireless communication systems with time periods during provision of timeslots for data transportation.

10. Claims 27, 32, 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Kwak (US 20040001472A1) as applied to claims 25, 30 and 41 respectively above, and further in view of Malkamaki (US 20040097253A1).

Regarding claims 27, 32, 43, Hwang discloses claims 25, 30, 41, but wherein at least one set of the allocated TTIs are included in a frequency division duplex (FDD) cell frame.

Malkamaki implements wireless communication systems with FDD mode and TTIs to define periods for data transportation between the user equipment and base stations (pars. 61, 67, 71, which provides frequency duplex and also allocation of TTIs at least on transmission).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Hwang in view of Kwak to include Malkamaki, as it is known to implement wireless communication during frequency duplex with allocation of TTIs during cell frames.

11. Claims 28, 33, 44 are rejected under 35 U.S.C. (a) as being unpatentable over Hwang in view of Kwak (US 20040001472A1) as applied to claims above, and further in view of Mousley et al. (US 20050083977A1).

Regarding claims 28, 33, 44, Hwang discloses claims 25, 30, 41, but wherein the FDD cell frame has a length of 10 ms and each TTI has a length of 2 ms.

Mousley teaches allocation of channels with TTI of length 2 ms and frames of length of 2 ms (pars. 27, 37, lengths of 2 and several ms are taught).

It would have been obvious to one of ordinary skill in the art to modify Hwang in view of Kwak, to include Mousley, as it is known in the art that TTIs conform to 2 ms and frames with lengths of 10 ms, to identify the frame lengths for transmission.

12. Claims 29, 34, 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Kwak (US 20040001472A1) as applied to claims above, and further in view of Cha et al. (US 20040090934A1).

Regarding claims 29, 34, 45, Hwang discloses claim 25, 30, 41, but the control signal limits the allowed HSDPA transmit power level to ensure that there is sufficient power reserved for non-HSDPA services.

Cha discloses allocating percentage of the allocated transmitting power for non services related to HSD packet access (pars.18, 27, describe transmission allocation power sufficient to non-high speed data services).

It would have obvious to one of skilled in the art at the time of the invention to modify the teachings of Hwang in view of Kwak, such that the control signal limits the allowed HSDPA transmit power level to ensure that there is sufficient power reserved for non-HSDPA services, in order to share the transmission power between differing services to render the system with resources more efficiently.

13. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Kwak (US 20040001472A1) as applied to claims above, and further in view of Wang et al. (US 20050117553A1).

Regarding claim 39, Hwang discloses claim 38, but it is silent on wherein the predetermined time period is at least 100 ms.

Wang teaches "TDMA frame having a duration of 10 ms per timeslot and, which subdivided into fifteen time slots", that includes at least 10 slots (i.e., 10x10 ms), (par. 42, lines 17-20), which reads on a predetermined time period of at least 100 ms.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Hwang in view of Kwak to include Wang, as it is known to implement wireless communication systems with time periods during provision of timeslots for data transportation.

14. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Kwak (US 20040001472A1) as applied to claims above, and further in view of Cha et al. (US 20040090934A1).

Regarding claim 40, Hwang discloses claim 38, but the control signal limits the allowed HSDPA transmit power level to ensure that there is sufficient power reserved for non-HSDPA services.

Cha discloses allocating percentage of the allocated transmitting power for non services related to HSD packet access (pars.18, 27).

It would have obvious to one of skilled in the art at the time of the invention to modify the teachings of Hwang in view of Kwak, such that the control signal limits the allowed HSDPA transmit power level to ensure that there is sufficient power reserved for non-HSDPA services, in order to share the transmission power between differing services to render the system with resources more efficiently.

15. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Kwak (US 20040001472A1) as applied to claims above, and further in view of Wang et al. (US 20050117553A1).

Regarding claim 47, Hwang discloses claim 46, but it is silent on wherein the predetermined time period is at least 100 ms.

Wang teaches "TDMA frame having a duration of 10 ms per timeslot and, which subdivided into fifteen time slots", that includes at least 10 slots (i.e., 10x10 ms), (par. 42, lines 17-20), which reads on a predetermined time period of at least 100 ms.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Hwang in view of Kwak, to include Wang, as it is known to implement wireless communication systems with time periods during provision of timeslots for data transportation.

16. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Kwak (US 20040001472A1) as applied to claims above, and further in view of Malkamaki (US 20040097253A1).

Regarding claim 48, Hwang discloses claim 46, but wherein at least one set of the allocated TTIs are included in a frequency division duplex (FDD) cell frame.

Malkamaki implements wireless communication systems with FDD mode and TTIs to define periods for data transportation between the user equipment and base stations (pars. 61, 67, 71, describes TTIs periods during transmission).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Hwang in view of Kwak, to include Wang, as it is

known to implement wireless communication systems with time periods during provision of timeslots for data transportation.

17. Claim 49 is rejected under 35 U.S.C. (a) as being unpatentable over Hwang in view of Kwak (US 20040001472A1) as applied to claims above, and further in view of Mousley et al. (US 20050083977A1).

Regarding claim 49, Hwang discloses claim 46, but wherein the FDD cell frame has a length of 10 ms and each TTI has a length of 2 ms.

Mousley teaches allocation of channels with TTI of length 2 ms and frames of length of 2 ms (pars. 27, 37, with lengths of slots with 2 ms existing).

It would have been obvious to one of ordinary skill in the art to modify the teachings of Hwang in view of Kwak, to include Mousley, as it is known in the art that TTIs conform to 2 ms and frames with lengths of 10 ms, to identify the frame lengths for transmission.

18. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Kwak (US 20040001472A1) as applied to claims above, and further in view of Cha et al. (US 20040090934A1).

Regarding claim 50, Hwang discloses claim 46, but the control signal limits the allowed HSDPA transmit power level to ensure that there is sufficient power reserved for non-HSDPA services.

Cha discloses allocating percentage of the allocated transmitting power for non services related to HSD packet access (pars.18, 27, power transmission is allocated as usage for non high speed services).

It would have obvious to one of skilled in the art at the time of the invention to modify the teachings of Hwang in view of Kwak, such that the control signal limits the allowed HSDPA transmit power level to ensure that there is sufficient power reserved for non-HSDPA services, in order to share the transmission power between differing services to render the system with resources more efficiently.

Conclusion

19. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **JULIO PEREZ** whose telephone number is (571)272-7846. The examiner can normally be reached on 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **PATRICK EDOUARD** can be reached on (571)272-7603. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

12/16/2009

/J. P./
Examiner, Art Unit 2617

/Patrick N. Edouard/
Supervisory Patent Examiner, Art Unit 2617